

Density steps Optimus RAD+R/F+C for cassette exposures

| RGDV x Data Set B density step setting | density voltage |
|---|-----------------|
| density correction steps visible at control desk | |
| 6% 12% 25% | [Volt] |
| - 8 - 4 - 2 | 0.630 |
| - 7 | 0.670 |
| - 6 - 3 | 0.710 |
| - 5 | 0.750 |
| - 4 - 2 - 1 | 0.800 |
| - 3 | 0.850 |
| - 2 - 1 | 0.900 |
| - 1 | 0.950 |
| 0 0 0 | 1.000 |
| + 1 | 1.060 |
| + 2 + 1 | 1.120 |
| + 3 | 1.180 |
| + 4 + 2 + 1 | > 1.250 < |
| + 5 | 1.320 |
| + 6 + 3 | 1.400 |
| + 7 | 1.500 |
| + 8 + 4 + 2 | 1.600 |

Even though the density voltage values might not exactly match the mathematic calculation values

default value multiplied with n times selected correction step factor
(example: $1.000 * 1.125 * 1.125 = 1.265$, see table >1250<)

it represents the value table to be used for the calculation of the density voltage which sets the exposure termination value.

The default value can also be any of the steps on the table if e.g. a density offset = organ dependent correction (+ or -) has been programmed at an APR data set. Corrections (manually selected with the (+) or (-) keys or with the slim or stout patient size keys) are only possible within the total correction limits.

If e.g. +2 12% steps are already displayed a +3 12% step patient size correction will not be possible as it is limited to 4 times 12% (or 8 times 6% or 2 times 25%).

The 0 (zero) or basic density value is set to 1 Volt for an easier calculation, it will be a different one depending on the

- chamber type
- cassette type
- screen type
- kV value.

The up-down calculation factors are 1.0625 for 6% steps, 1.1125 for 12% steps and 1.25 for 25% steps.